# SACRAMENTO VALLEY, CALIF., WITHIN THE EXISTING FLOOD-CONTROL PROJECT

### LETTER

FROM

## THE SECRETARY OF WAR

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, UNITED STATES ARMY, DATED MARCH 20, 1941, SUBMITTING AN INTERIM REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND AN ILLUSTRATION, ON A PRELIMINARY EXAMINATION AND SURVEY OF SACRAMENTO VALLEY, CALIF., WITHIN THE EXISTING FLOOD-CONTROL PROJECT, AUTHORIZED BY THE FLOOD CONTROL ACT APPROVED JUNE 22, 1936

May 7, 1941.—Referred to the Committee on Flood Control and ordered to be printed with an illustration

WAR DEPARTMENT, Washington, May 5, 1941.

The Speaker of the House of Representatives.

Dear Mr. Speaker: I am transmitting herewith an interim report dated March 20, 1941, from the Chief of Engineers, United States Army, on preliminary examination and survey of Sacramento Valley within the existing flood-control project, authorized by the Flood Control Act approved June 22, 1936, together with accompanying papers and illustration.

The Bureau of the Budget has been consulted and advises that authorization of the completion of the project, as recommended by the Chief of Engineers, would not be in conflict with the program of the

President.

Sincerely yours,

Henry L. Stimson, Secretary of War.

## WAR DEPARTMENT, OFFICE OF THE CHIEF OF ENGINEERS,

Washington, March 20, 1941.

Subject: Sacramento Valley within the existing flood-control project. To: The Secretary of War.

1. I submit for transmission to Congress an interim report with accompanying papers and illustration on preliminary examination and survey of Sacramento Valley within the existing flood-control project, made under authority of the Flood Control Act approved June 22, 1936, which provides for an examination of the Sacramento and San Joaquin River Valleys, Calif. Separate reports are being made on

other areas in the two watersheds.

2. This report considers the advisability of continuing construction within the existing flood-control project area and possible changes in the local cooperation to be required. Improvement authorized by Congress provides for enlargement of the river channel below the mouth of Cache Slough; for making two cut-offs between the mouth of Feather River and Colusa; for construction of four bypass weirs and the reconstruction of a fifth; for construction of out-fall gates at the mouth of Butte slough; for construction of levees, including certain drainage-pumping plants; for a 5-year program of bank-construction works and levee set-backs; and during the 5-year program for maintenance of the enlarged river channel below Cache Slough, and operation of the gaging stations on navigable rivers and streams. The total cost for construction and maintenance of the project from 1910 to December 31, 1940, has been approximately \$71,000,000, of which \$52,000,000 was from State and local funds and \$19,000,000 was from Federal funds. The estimated cost for completing the work planned under the existing project is \$10,500,000. Present authorization limits the amount of Federal participation to a total of \$20,100,000.

3. The Board of Engineers for Rivers and Harbors reports that about 1,000,000 acres of land within the existing flood-control project area are in danger of being flooded, either by overtopping of levees not yet completed to project grade or from possible failure of levees of insufficient section. The Board estimates that direct damage resulting from four major floods in the area within the past 4 years aggregated \$11,000,000. In view of the large losses that may be expected to continue to occur unless the project is completed the Board is of the opinion that an expenditure of the necessary additional \$10,500,000 is economically justified. It further considers that for works yet to be constructed the requirements of local cooperation should be substantially the same as apply to projects authorized by

current legislation.

4. I concur in the views of the Board. Much valuable land and a considerable urban area in the Sacramento Valley is still subject to damage during severe floods such as have occurred repeatedly within the past 4 years. Completion of the flood-control project is highly desirable. I therefore recommend completion of the Sacramento Valley flood-control project at an estimated additional first cost to the United States of \$10,500,000; subject to the provisions that the State of California or responsible local agencies give assurances satisfactory to the Secretary of War that they will provide, without cost

to the United States, all lands, easements, and rights-of-way necessary for the completion of the project; bear the expense of necessary highway, railroad, and bridge alterations; hold and save the United States free from claims for damages resulting from construction of the works; and maintain and operate all works, after completion, in accordance with regulations prescribed by the Secretary of War.

J. L. Schley,

Major General,

Chief of Engineers.

#### REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

WAR DEPARTMENT,
THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
Washington, March 3, 1941.

Subject: Interim report on Sacramento Valley within the existing flood-control project.

To: The Chief of Engineers, United States Army.

1. This interim report on the Sacramento Valley within the existing flood-control project is made under authority of the Flood Control Act approved June 22, 1936, and considers the advisability of continuing construction on the existing project and possible changes in the extent of local cooperation to be required. A final report will be submitted

at a later date.

2. Sacramento River has its source in the Trinity and Warner Mountains in northern California, flows south 320 miles, and empties into the eastern end of Suisun Bay, an arm of San Francisco Bay. It drains an area of 27,100 square miles. In its upper reaches, lying in the mountains and foothills, the river flows through rocky canyons. In its middle and lower reaches it traverses a broad alluvial plain, much of which has been reclaimed by construction of levees and related works. The lands in this section are highly productive and support an extensive agricultural development. Several important cities, including Sacramento, the State capital, are located in this area. The 1940 population of the Sacramento Valley was about 375,000, of whom 260,000 reside within the area protected by the existing flood-control project, the subject of this report. The navigation project for the Sacramento River provides for a channel 10 feet deep to Sacramento, 59 miles, with such lesser depths as practicable thence upstream to Red Bluff, an additional distance of 187 miles.

3. The authorized plan for protecting lands in Sacramento Valley within the existing flood-control project area provides for enlargement of the river channel below the mouth of Cache Slough; for making two cut-offs between the mouth of Feather River and Colusa; for construction of four bypass weirs and the reconstruction of a fifth; for construction of out-fall gates at the mouth of Butte Slough; for construction of levees, including certain drainage-pumping plants; for a 5-year program of bank-construction works and levee set-backs; and, during the 5-year program for maintenance of the enlarged river channel below Cache Slough, and operation of the gaging stations on navigable rivers and streams. The existing project is a joint Federal-State-local improvement. Total expenditures on construction of the

existing project from 1910 to December 31, 1940, were approximately \$71,000,000. The expenditures by the United States for new work and maintenance were about \$19,000,000, and the combined expenditures of the State and local interests were about \$52,000,000. Existing authorizations limit the amount of Federal participation to \$20,100,000. The estimated cost of completing the work under the

existing project is \$10,500,000.

4. About 1,000,000 acres of land within the flood-control project area are subject to flooding either by reason of levees not yet completed to project grade or by reason of failure of levees of insufficient section. Most of this is agricultural land, but there are also a number of urban areas subject to potential damage during severe major floods. Sacramento Valley has experienced four major floods during the past 4 vears. Flood-damage surveys were made within the protected area closely following these four floods and it is estimated that direct damages aggregated \$11,000,000. Indirect damages have not been evaluated, but they were substantial. Considering the large sums already expended in providing protection for these lands, and the large flood losses that are to be anticipated unless the project is completed, the Board is of the opinion that an expenditure of an additional \$10,500,000 for completion of construction of the flood-control project is desirable and is economically justified. It further considers that for works yet to be constructed the requirements of local cooperation should be substantially the same as apply to projects authorized by current legislation.

5. The Board recommends completion of the Sacramento Valley flood-control project at an estimated additional first cost to the United States of \$10,500,000; subject to the provisions that the State of California, or responsible local agencies, give assurances satisfactory to the Secretary of War that they will provide, without cost to the United States, all lands, easements, and rights-of-way necessary for the completion of the project; bear the expense of necessary highway, railroad, and bridge alterations; hold and save the United States free from claims for damages resulting from construction of the works; and maintain and operate all works, after completion, in accordance with regulations prescribed by the Secre-

tary of War.

For the Board:

Thomas M. Robins,
Brigadier General, Corps of Engineers,
Senior Member.

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